

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 79-156

NPDES PERMIT NO. CA0005738

REISSUANCE OF WASTE DISCHARGE REQUIREMENTS FOR:

COLGATE-PALMOLIVE COMPANY
BERKELEY, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter Board) finds that:

1. Colgate-Palmolive Company, hereinafter the discharger, submitted a report of waste discharge (NPDES Short Form C) dated May 14, 1979, applying for reissuance of its current NPDES Permit (Order No. 74-199 adopted on December 17, 1974, and amended by Order No. 76-32 adopted on April 20, 1976).
2. The discharger manufactures soap, glycerine, detergents, cosmetics, and related products. The discharger utilizes Bay water for cooling and manufacturing purposes and discharges wastes as described below:
 - a. Waste 001 consists of an average of 0.73 million gallons per day (mgd) and a maximum of 2.5 mgd of waste resulting from glycerine concentration and distillation. The waste is discharged via a storm drain in Bolivar Drive to San Francisco Bay at the foot of Potter Street. Occasionally, for maintenance purposes, the City of Berkeley directs the flow into Aquatic Park Lagoon, a water of the United States.
 - b. Waste 002 consists of an average of 0.043 mgd and a maximum of 0.22 mgd of waste resulting from oleum sulfonation and sulfation and is discharged to San Francisco Bay via the Bolivar Drive storm sewer described above.
3. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin in April 1975. The Basin Plan contains water quality objectives for San Francisco Bay and Aquatic Park Lagoon.
4. The beneficial uses of San Francisco Bay and contiguous waters are:
 - a. Recreation
 - b. Fish migration and habitat
 - c. Habitat and resting for waterfowl and migratory birds
 - d. Industrial water supply
 - e. Esthetic enjoyment
 - f. Navigation
5. Effluent limitation and toxic effluent standards established pursuant to Sections 208(b), 301, 304, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharge.

6. The Board has notified the discharger and interested agencies and persons of its intent to reissue waste discharge requirements for the existing discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
7. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.
8. The Board in a public meeting heard and considered all comments pertaining to the discharge.
9. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from the date of hearing provided the Regional Administrator has no objections.

IT IS HEREBY ORDERED that Colgate-Palmolive Company, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. The discharge of an effluent containing constituents in excess of the following limits is prohibited:

Discharge Serial #	Constituent	Units	30-Day Average	Maximum Daily	
001	*BOD ₅	lbs/day	27	81	
		kg/day	12.2	36.7	
	*COD	lbs/day	81	243	
		kg/day	36.7	110.2	
	*Total suspended solids	lbs/day	5.4	16.2	
		kg/day	2.4	7.3	
002	*Oil & Grease	lbs/day	2.7	8.1	
		kg/day	1.2	3.7	
	Settleable Solids	ml/l-hr	0.1	0.5	
	*BOD ₅	lbs/day	1.5	6.8	
		kg/day	0.7	3.1	
*COD	lbs/day	6.8	30.0		
	kg/day	3.1	13.6		
*Total suspended solids	lbs/day	2.3	11.3		
	kg/day	1.0	5.1		
*Surfactants	lbs/day	2.3	11.3		
	kg/day	1.0	5.1		

*Limits on these parameters are incremental over intake.

<u>Discharge Serial #</u>	<u>Constituent</u>	<u>Units</u>	<u>30-Day Average</u>	<u>Maximum Daily</u>
	*Oil & Grease	lbs/day	5.3	18.8
		kg/day	2.4	8.5
	Settleable Solids	ml/l-hr	0.1	0.5

*Limits on these parameters are incremental over intake.

2. The temperature of discharges 001 and 002 shall not exceed 100°F.
3. Discharge 001 and 002 shall not have a pH of less than 6.5 nor greater than 8.5, except that if the influent water pH is greater than 8.5, the effluent pH shall not exceed the influent pH.
4. In any representative set of samples the wastes 001 and 002 discharged shall meet the following limit of quality:

TOXICITY:

The survival of test fishes in 96 hour bioassays of the effluent shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

B. Receiving Water Limitations

1. Neither the discharges nor stormwater runoff from the plant site shall cause the following conditions to exist in waters of the State at any place.
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
 - a. Dissolved oxygen 5.0 mg/l minimum. Annual median - 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
 - b. Dissolved sulfide 0.1 mg/l maximum.
 - c. pH Variation from natural ambient pH by more than 0.2 pH units.

C. Provisions

1. All drainage from areas used to store and handle process materials or products shall be combined with the wastes before discharge.

Fail-safe source control measures shall be used in areas where mineral acids and caustics are stored or handled to exclude them from the wastes.
2. The discharger shall comply with this Order immediately upon adoption. Order Nos. 74-199 and 76-32, adopted December 17, 1974, and April 20, 1976, respectively, are hereby rescinded.
3. The discharger shall review and update annually its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
4. The discharger shall comply with the self-monitoring program as ordered by the Executive Officer.
5. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977 except A.5, A.12, A.16, B.2, B.3, and B.5.
6. This Order expires on June 30, 1981, and the discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 20, 1979.

Attachments:

Standard Provisions, Reporting
Requirements & Definitions - (4/77)
Self-Monitoring Program

FRED H. DIERKER
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

REVISED

SELF-MONITORING PROGRAM
FOR

COLGATE-PALMOLIVE COMPANY

BERKELEY, ALAMEDA COUNTY

NPDES NO. CA 0005738

ORDER NO. 79-156

CONSISTS OF

PART A, dated (1/78)

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT AND INTAKE

<u>Station</u>	<u>Description</u>
I-n	At any point in the water supply intake system prior to any usage of intake water.

B. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At any point in the outfall from the treatment facilities for Waste 001 between the point of discharge and the point at which all wastes tributary to that outfall is present.
E-002	At any point in the outfall from the treatment facilities for Waste 002 between the point of discharge and the point at which all waste tributary to that outfall is present.

C. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C-1	The points in San Francisco Bay located along an arc of 25-foot radius from the mouth of the storm sewer at the shore of the Bay opposite the foot of Potter Street in Berkeley.
C-2	The points in Berkeley Aquatic Park Lagoon located along an arc of 25-foot radius from the point at which Waste 001 intermittently discharges into the lagoon.

D. LAND OBSERVATIONS

<u>Station</u>	<u>Description</u>
L-1	The shore of San Francisco Bay extending 50 feet to each side of the mouth of the storm sewer opposite the foot of Potter Street in Berkeley.
L-2	The shore of Berkeley Aquatic Park Lagoon extending 50 feet to each side of the point at which Waste 001 intermittently discharges into the lagoon.

II. SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSES

A. The schedule of sampling, measurements, and analyses shall be as given in Table I.

B. Deletions and modifications to Part A (1/78) are:

Deletions: Paragraphs C.3, C.4, C.5.d, C.5.e, D.4, E.2.b, E.4, F.3.e, F.3.g(2).

Modification: Paragraph F.3 is modified to require submission of self-monitoring reports on a quarterly basis.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 79-156.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

FRED H. DIERKER
Executive Officer

Attachment:
Table I

Effective Date _____

TABLE I
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	I		E-001		E-002		All C Stations		All L Stations				
TYPE OF SAMPLE	G	(1) C-24	G	(1) C-24	G	(1) C-24	(2) G	O	G	O			
Flow Rate (mgd) (3)		D		D		D							
BOD, 5-day, 20° C, & COD (mg/l & kg/day) (4)		(8) 2/M		(8) 2/M		M							
Chlorine Residual & Dosage (mg/l & kg/day)													
Settleable Matter (ml/1-hr. & cu. ft./day) (5)	W		W		W								
Total Suspended Matter (mg/l & kg/day) (4)		M		M		M							
Oil & Grease (mg/l & kg/day) (4,7)	3M		3M		3M								
Coliform (Total or Fecal) (MPN/100 ml) per req't													
Fish Toxicity, 96-hr. TL ₅₀ % Survival in undiluted waste				3M		3M							
Ammonia Nitrogen (mg/l & kg/day)													
Nitrate Nitrogen (mg/l & kg/day)													
Nitrite Nitrogen (mg/l & kg/day)													
Total Organic Nitrogen (mg/l & kg/day)													
Total Phosphate (mg/l & kg/day)													
Turbidity (NTU)		M		M		M							
pH (units)	D		D		D		M (6)						
Dissolved Oxygen (mg/l and % Saturation)													
Temperature (°C)			D		D		M (6)						
Apparent Color (color units)													
Secchi Disc (inches)													
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)													
Arsenic (mg/l & kg/day)													
Cadmium (mg/l & kg/day)													
Chromium, Total (mg/l & kg/day)													
Copper (mg/l & kg/day)													
Cyanide (mg/l & kg/day)													
Silver (mg/l & kg/day)													
Lead (mg/l & kg/day)													

TABLE I (continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	I		E-001		E-002		All C Stations		All L Stations				
TYPE OF SAMPLE	G	(1) C-24	G	(1) C-24	G	(1) C-24	(2) G	O	G	O			
Mercury (mg/l & kg/day)													
Nickel (mg/l & kg/day)													
Zinc (mg/l & kg/day)													
PHENOLIC COMPOUNDS (mg/l & kg/day)													
All Applicable Standard Observations				M		M		M		M			
Bottom Sediment Analyses and Observations													
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)													
Methylene blue active substance (mg/l & kg/day)		M				M							

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
 C-24 = composite sample - 24-hour
 C-X = composite sample - X hours
 (used when discharge does not
 continue for 24-hour period)
 Cont = continuous sampling
 DI = depth-integrated sample
 BS = bottom sediment sample
 O = observation

TYPES OF STATIONS

I = intake and/or water supply stations
 A = treatment facility influent stations
 E = waste effluent stations
 C = receiving water stations
 P = treatment facilities perimeter stations
 L = basin and/or pond levee stations
 B = bottom sediment stations
 G = groundwater stations

FREQUENCY OF SAMPLING

E = each occurrence
 H = once each hour
 D = once each day
 W = once each week
 M = once each month
 Y = once each year

2/H = twice per hour
 2/W = 2 days per week
 5/W = 5 days per week
 2/M = 2 days per month
 2/Y = once in March and
 once in September
 Q = quarterly, once in
 March, June, Sept.
 and December

2H = every 2 hours
 2D = every 2 days
 2W = every 2 weeks
 3M = every 3 months
 Cont = continuous

NOTES FOR TABLE I

1. If the plant operates fewer than 24 hours on a sampling day, collect the composites for Stations I, E-001 and E-002 throughout the operating period. Take the first and last aliquots when flow begins and stops, respectively.
2. Collect samples at the down-current side of Stations C-1 and C-2, except as otherwise specified below.
3. Daily flow may be determined by measurement, or calculated from pump data and the actual number of hours operated.
4. Report influent, effluent, and incremental data.
5. Report influent, effluent, and incremental data for settleable matter. If the first sample collected on any day contains more than 0.1 ml/l-hr as the incremental value for settleable matter, collect four samples on the following day and calculate the average for that day.
6. Determine pH temperature at both the up-current and down-current sides of Stations C-1 and C-2. Report both observed values and their difference.
7. Oil and grease sampling shall consist of 3 grab samples taken at equal intervals during the working day, with each sample being collected in a glass container and analyzed separately. Results shall be expressed as the weighted average of the 3 values based upon the instantaneous flow rates occurring at each time.
8. COD only 2/M; BOD 1/M.